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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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SIDLEY AUSTIN BROWN & WOOD LLP 717 NORTH HARWOOD SUITE 3400 DALLAS, TX 75201				
			EXAMINER AGGARWAL, YOGESH K	
			ART UNIT 2615	PAPER NUMBER

DATE MAILED: 08/25/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/942,893

Applicant(s)

SUMITOMO ET AL.

Examiner

Yogesh K Aggarwal

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. ____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>4.7</u> . | 6) <input type="checkbox"/> Other: ____. |

Claim Objections

1. Claims 8 and 10 are objected to because of the following informalities:

“the number of images” should be “number of images”.

2. Claims 8 and 10 are objected to because of the following informalities:

“the number of pixels” should be “number of pixels”.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 3-6 and 8-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Okauchi (US Patent # 5,907,353).

[Claims 1, 8, 9]

Okauchi teaches an image taking apparatus (figure 1), comprising an image pick-up element (figure 1, element 25) which picks up a plurality of images different in photographing condition (col. 3 lines 52-54, Different photographing conditions are referred to as ‘normal’ and ‘high quality’, read col. 3 lines 20-21), an image memory (figure 1, element 36) which temporarily stores said plurality of images picked up by said image pick-up element (col. 9 lines 39-41); an image-number-specifying device which specifies the number of images to be used for creating a composite image among said plurality of images stored in said image memory (col. 9 lines 21-32, col. 9 lines 52-62) and an image composer which creates said composite image by

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composing images of said number of images specified by said image-number specifying device (col. 9 lines 39-51, col. 9 lines 62-67).

[Claims 3 and 10]

The maximum number of images that can be specified by the image-number-specifying device used for creating a composite image that can be stored in the memory card 36 cannot exceed the maximum number of images that the memory card can store because the capacity of the card is full. For example, if the number of images that a memory card can store is 4 then the maximum number of images specified for creating a composite image cannot exceed 4 because that's the maximum the memory can store.

[Claim 4]

Okauchi teaches a display (figures 1, 2, element 3) for displaying said plurality of images stored in said image memory side by side (col. 6 lines 52-63).

[Claim 5]

Okauchi teaches a selector (figure 1, element 5) for specifying one of photographing modes (col. 3 lines 20-21) and a controller for automatically setting the number of images to be stored in said image memory depending on a specified photographing mode (col. 9 lines 21-32, col. 9 lines 52-62) (Either 4 or 9 images can be specified depending upon a focus evaluation mode as shown in figure 4).

[Claim 6]

Okauchi teaches a 'high quality mode' and a 'normal quality mode' (col. 3 lines 20-21), which would inherently require it to give priority to higher quality during 'high quality mode' and

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priority to speed during 'normal quality mode' because the number of images to be synthesized are lesser.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 2, 7, 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okauchi (US Patent # 5,907,353) in view of Shen et al. (US Patent # 6,122,411).

[Claim 2]

Okauchi fails to teach "wherein the number of images to be stored in said image memory is decided by capacity of said image memory and image size". However Shen et al. teaches that the number of images to be stored in said image memory is decided by capacity of said image memory and image size (col. 4 lines 16-35). Therefore taking the combined teachings of Okauchi and Shen it would have been obvious to one skilled in the art at the time of the invention to have been motivated to have the number of images to be stored in said image memory be decided by capacity of said image memory and image size in order to use the memory efficiently. The benefit of doing so would be to control the utilization of memory space in such a way that the memory space can be used efficiently and in a cost-effective manner.

[Claim 7]

Okauchi fails to teach "wherein the number of images to be stored in said image memory is the maximum number of images that said image memory can store when said mode which give

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priority to quality of image is specified". However Shen et al. teaches a condition when the high resolution mode is specified (corresponding to a mode which gives priority to the quality of image) and there is not enough space to take any more high resolution pictures (maximum number of images that said image memory can store for the 'high resolution mode') but there is space for storing at least one more low resolution picture. When this condition is reached the camera automatically switches to a low-resolution mode after storing the maximum number of images in the high-resolution mode (col. 3 lines 59-67, col. 4 lines 1-35). Therefore taking the combined teachings of Okauchi and Shen it would have been obvious to one skilled in the art at the time of the invention to have been motivated to have the number of images to be stored in said image memory being the maximum number of images that said image memory can store when said mode which give priority to quality of image is specified in order to utilize the memory space efficiently. The benefit of doing so would be to store both low and high-resolution images (corresponding to different number of pixels) in the memory as long as there is space available in the memory as taught in Shen (col. 3 lines 60-63).

[Claim 11]

Okauchi fails to teach wherein the number of pixels to be picked up is capable of being specified, and wherein the number of images to be set by said image-pick-up-number controller is determined by the number of pixels specified and capacity of said image memory. However Shen et al. teaches that the number of pixels to be picked up is capable of being specified, and wherein the number of images to be set by said image-pick-up-number controller is determined by the number of pixels specified and capacity of said image memory (col. 4 lines 16-35, The image size is directly related to the number of pixels specified for a low or high resolution

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image). Therefore taking the combined teachings of Okauchi and Shen, it would have been obvious to one skilled in the art at the time of the invention to have been motivated to have that the number of pixels to be picked up is capable of being specified, and wherein the number of images to be set by said image-pick-up-number controller is determined by the number of pixels specified and capacity of said image memory in order to use the memory efficiently. The benefit of doing so would be to control the utilization of memory space in such a way that the memory space can be used efficiently and in a cost-effective manner.

[Claim 12]

Okauchi fails to teach “a controller which discriminates whether it is possible to store images by the number of images set by said image-pick-up-number controller in said image memory, and controls so as not to pick up images when it is discriminated to be impossible to store said images”. However Shen et al. teaches a 4-bit MPU 34 that can keep track of how many more pictures of high and low resolution can be stored in the camera memory and when it is impossible to store any more images of each resolution it displays ‘0’(col. 4 lines 17-35). Therefore taking the combined teachings of Okauchi and Shen it would have been obvious to one skilled in the art at the time of the invention to have been motivated to have a controller which discriminates whether it is possible to store images by the number of images set by said image-pick-up-number controller in said image memory, and controls so as not to pick up images when it is discriminated to be impossible to store said images in order to use the memory space more efficiently. The benefit of doing so would be to store both low and high-resolution images (corresponding to different number of pixels) in the memory as long as there is space available in the memory as taught in Shen (col. 3 lines 60-63).

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Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

i. Katsuda et al. (US PG-PUB 2003/0190089) teaches that a user can specify the number of images to be synthesized (Paragraph 48).

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yogesh K Aggarwal whose telephone number is (703) 305-0346. The examiner can normally be reached on M-F 9:00AM-5:30PM.

9. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Christensen can be reached on (703) 308-9644. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

YKA
August 18, 2004


TUAN HO
PRIMARY EXAMINER